

(from Freya, a Scandinavian goddess) for the form which I have named *B. Edwardsii*, and for the new forms *F. spinulosa* and *F. searadiata*. In these forms all the inflated portion of the arms is in fact entirely covered with polygonal plates still arranged in not very regular arches, equal in number to the adambulacral plates in *B. Edwardsii*, of which we possess only one arm, but forming, on the contrary, a regular mosaic in *F. spinulosa* and *F. searadiata*. This last form, obtained from a depth of 4060 metres, is remarkable for the small number of its arms, six only; *F. spinulosa*, on the contrary, has from eleven to fifteen, generally thirteen very long arms; it is of an orange-yellow colour, and when living diffuses a pretty strong alliaceous odour. It is met with from the Cape Verde to the Azores at depths of 2000–4000 metres. The *Freyellæ*, which are remarkable even by the peculiar construction of their skeleton, do not bear large spines like *B. coronata* or *robusta*; their skeletal plates are smooth in *F. Edwardsii*, furnished each with a small prickle in *F. searadiata*, and with a transverse row of small spinules in *F. spinulosa*.

Lastly, the *Coronasteres* in appearance exactly resemble the species of *Asterias* of the group of *A. tenuispina*, and possess, like them, a dorsal skeleton reticulated with large meshes. But their ambulacral tubes are arranged only in two rows, and their spines are enveloped in a sheath which may ascend nearly to the apex and which bears an elegant fringe of pedicellariæ. The arms, which are very easily detached from the disc, as in the *Brisingæ*, are eleven in number. A single specimen was obtained at the Cape Verde Islands at a depth of 250 metres. *Coronaster* forms a term exactly intermediate between *Labidiaster* and *Asterias*, and the latter is thus closely affined to the *Brisingæ*, just as *Freyella searadiata* leads directly from the *Brisingæ* to the *Pedicellasteres* with five and six arms. The *Brisingæ*, while still remaining very remarkable forms and comparatively isolated from the Ophiurans to which they were at first approximated, are thus, by the new discoveries, more and more distinctly united with the Stellerida properly so called. From the point of view of the development of the dorsal skeleton they may be arranged in an ascending series after the following fashion:—*Hymenodiscus Agassizii*, E. P.; *Brisinga mediterranea*, E. P.; *B. elegans*, E. P.; *B. endecacnemos*, Asbjørnsen; *B. coronata*, E. P.; *B. semi-coronata*, E. P.; *B. robusta*, E. P.; *Labidiaster radius*, Lovén; *Brisingaster Robilliardi*, de Loriol; *Pedicellaster typicus*, Lovén; *Coronaster Parfaiti*, E. P.; *Asterias tenuispina*, Lamk. The *Freyellæ* form an aberrant series.—*Comptes Rendus*, August 10, 1885, p. 441.

On a new Species of Land-Tortoise, brought by M. Humblot to the Museum of Natural History. By M. LÉON VAILLANT.

The abundance and remarkable variety of specific types presented by the group of Land-Tortoises in Africa, and especially in the islands situated to the east of that continent, are facts which have long been known, and important memoirs have been published upon this subject, among which it is sufficient to refer to Dr. Günther's

memoir upon the gigantic Tortoises. One may therefore be astonished at finding in this region an animal of comparatively large size belonging to this group, and the characters of which do not allow of its being confounded with any other species of the genus. It is to one of our most zealous travellers, M. Humblot, that the Museum is indebted for this curious Chelonian. That naturalist, who was in possession of seven individuals of it, informs us that the present one, which is of the size of a large *Testudo radiata*, was not the largest, some of them being of nearly twice its dimensions.

The carapace is convex, generally hemispherical, with the anterior and posterior orifices not much raised, resembling that of *Testudo radiata*, Shaw. The dorsal shield presents a slight constriction in front, and is rounded behind; there is a nuchal shield, although it is very small. The form of the plastron particularly characterizes this species. The gular plate, instead of being double, as is usually the case in the Tortoises properly so called, is simple, as in the few species of which Gray proposed to form the genus *Chersina*; this, however, is only observed on the lower surface; on the upper surface there is a groove, an indication of the usual division. This plate and the bony part which supports it, distinct from the rest of the plastron, form a flattened, triangular process, twice as long as the width of its base, and bent from below upwards, a peculiar arrangement, the singularity of which struck M. Humblot, who observed it in his seven individuals.

The colour of the dorsal shield is yellowish red, with brown tints upon the periphery of the scaly plates of the disc and on the limb; the plastron, which is uniformly straw-yellow, shows some traces of a darker tint towards the margin of the abdominal plates. In fact the general coloration partakes at once of those observed in *Testudo radiata*, Shaw, and *Testudo (Chersina) angulata*, Dum.

These characters enable us at the first glance to distinguish this Chelonian from the other known true Tortoises; I propose to name it *Testudo yniphora*, in allusion to the peculiar form of the anterior part of the plastron.

Although the origin of this species cannot be precisely fixed, we may nevertheless regard it as certain, from the information furnished by the Arab sailors who sold these Tortoises to M. Humblot at the Great Comoro, that these animals had been captured upon an islet situated north-north-east of that place; moreover, considering the prevailing winds at the time, and the method of navigation adopted by these men, their vessel could only have come from this direction, that is from a locality situated towards Aldabra, perhaps even a dependency of that group of islands, where we know of such curious representations of the family Chersites.—*Comptes Rendus*, August 10, 1885, p. 440.

*Orientation of the Embryo and Formation of the Cocoon in
Periplaneta orientalis.* By M. P. HALLEZ.

M. Hallez finds that each of the sixteen ovigerous tubes in *Periplaneta orientalis* contains a chaplet of ova gradually passing